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ABSTRACT OF THE DISCLOSURE

A method for restoring traffic in a network. The network includes plural distinct nodes interconnected by plural distinct spans, each span having working links and spare links. Each node has a digital cross-connect switch for making and breaking connections between adjacent spans forming span pairs at a node. Cross-connections between spare links in adjacent spans are made such that sets of successive nodes through which the adjacent spans form span form closed paths. A method of finding construction closed paths is described in which statelets are broadcast through the network. In a preferred method of implementation of the method, the statelet broadcast occurs not in response to a network failure, but across the entire network before any particular span failure and may be carried out during normal network operations as a continual re-configuration of the network.